and Meebold's collection from Mysore. But there is no specimen from Tamil Nadu in MH. Hence the present collection is the first report from the state.

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#### REFERENCES

Gamble, J.S. (1921-1925): Flora of the Presidency of Madras Parts 4-7, Adlard & Sons, London. Henry, A.N., G.R. Kumari & V. Chithra (1987): Flora of

Tamil Nadu, India. I: Analysis. Vol. 2. BSI, Coimbatore. HOOKER, J.D. (1872-1897): The Flora of British India. Vols. 1-7. Reeve & Co., London.

# 37. A NOTE ON THE IDENTITY AND DISTRIBUTION OF HYDROLEA ZEYLANICA (L.) VAHL VAR. ERECTA HAINES (HYDROPHYLLACEAE)

(With one text-figure)

The family Hydrophyllaceae is represented by 22 genera and about 275 subcosmopolitan species, with greater concentration in dry Western and Northern America (Mabberley, 1987). Of these, 20 species of the genus *Hydrolea* L. are known to occur in the world especially in southeast Asia, Africa and tropical America. In India, a single species, namely *Hydrolea zeylanica*, is found throughout the country, mostly in moist situations around ponds, tanks, ditches, irrigation canals, in rice fields and other wetlands.

Haines (1922) described an infraspecific taxon under *Hydrolea zeylanica* based on his collections from Purneah, Bihar and distinguished his new variety *H. zeylanica* (L.) Vahl var. *erecta* Haines from the type (var. *diffusa* sensu Haines) by its erect habit, longer leaves and non-glandular inflorescence. He remarked that this erect form is a very pretty plant when in full bloom. I collected a large number of specimens belonging to both the varieties from different parts of Orissa, studied their morphological characters and is of the opinion

that *H. zeylanica* (L.) Vahl var. *erecta* Haines is undoubtedly a distinct taxonomic entity. It can be distinguished from var. *zeylanica* as per the following consistent key characters:

Erect herbs, leaves narrowly lanceolate, acuminate, glaucous beneath, cauline leaves reflexed. Inflorescence and calyx pubescent, never glandular var. erecta

Diffuse or procumbent herbs, rooting at nodes, leaves broadly lanceolate to elliptic-lanceolate, acute,

leaves broadly lanceolate to elliptic-lanceolate, acute, not glaucous beneath. Inflorescence and calyx densely glandular-pubescent .........................var. zeylanica.

Nomenclature, brief description, phenology, ecology and distribution in respect of *H. zeylanica* var. *erecta* is presented below. The occurrence of the taxon in Orissa is a new distributional record.

Hydrolea zeylanica (Linn.) Vahl var. erecta Haines Bot. Bihar & Orissa 2:571.1922 (Fig.1)

Erect herbs, 20-60 cm high, glabrous below. Inflorescence cymose, terminating the

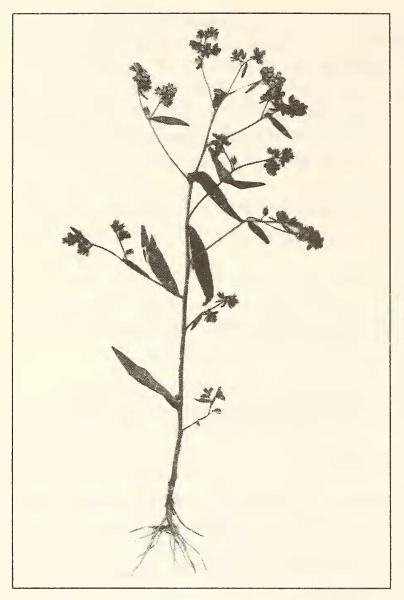


Fig. 1. Hydrolea zeylanica var. erecta. Herbarium specimen

elongate lateral branches or panicled by suppression of leaves, pubescent, never with glands, calyx pubescent, lobes lanceolate, acuminate, apex greenish, distinctly nerved. Ovary 2-celled, ovules many, styles 2, distinct. Capsule ovoid-ellipsoid, septifragal, enclosed by the calyx lobes.

Fl. & Fr.: August-November.

**Ecology**: Occasional; in swamps, ditches and muddy places associated with *Ludwigia* spp., *Sphenoclea zeylanica*, *Monochoria hastata* and some aquatic grasses and sedges.

Material examined: Nilagiri, Balasore district (Orissa), 14.ix.1995, P.C. Panda 4297.

**Distribution**: Bihar and Orissa. Most likely to occur in other coastal states of India.

I also collected specimens of *Hydrolea zeylanica* var. *zeylanica* having pure white flowers from Ranpur mals, Nayagarh district, Orissa (Field No. *Panda* 5491) where a large population was observed in flowering condition. This white flower colour of *H. zeylanica* is a new record and is of taxonomic and ecological interest.

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## REFERENCES

HAINES, H.H (1922): The Botany of Bihar & Orissa, Part 4, Adlard & Son and West Newman Ltd., London.

MABBERLEY, D.J. (1987): The Plant Book, Cambridge University Press, Cambridge, U.K.

## 38. HELIOTROPIUM BACCIFERUM FORSSK. VAR. TUBERCULOSUM (BOISS.) KAZMI --- A NEW RECORD FOR RAJASTHAN

(With one text-figure)

While revising the family Boraginaceae from the Indian subcontinent the authors observed that specimens of *Heliotropium* 

bacciferum Forssk. collected from Rajasthan are not actually H. bacciferum. On critical examination, they turned out to be